CLAIMS

1. A method for the selection of molecules active in the prevention and/or treatment of Huntington's Disease characterized in that the ability of said molecules to inhibit the activity of the NRSE element is evaluated.

2. A method according to claim 1 comprising the following steps:

(a) incubation of said molecules in presence of a cell system, stably transfected with the NRSE sequence inserted upstream of a reporter gene,

(b) evaluation of inhibition of the NRSE sequence activity by measurement of gene reporter activity.

3. A method according to claim 2, wherein said reporter gene is selected from the group consisting of the chloramphenicol acetyle transferase gene, the luciferase gene and the green fluorescent protein gene.

4. A method according to claims 2 and 3, wherein said cells are cells expressing mutated hungtintin.

5. A method according to claims 2 to 4, further comprising the evaluation of the amounts of REST factor in the cytoplasm and/or nucleus of said cells.

6. A cellular system suitable to perform the method described in claims 1-5 characterized in that it consists of cells that are engineered to stably contain the NRSE sequence inserted upstream of a reporter gene

7. A cellular system according to claim 6 wherein the reporter gene is selected from the group consisting of the chloramphenicol acetyle transferase gene, the luciferase gene and the green fluorescent protein gene.

8. A cellular system according to claims 6-7, whose cells are neuronal cells.

9. A cellular system according to claim 8, whose cells are striatal cells.

10. A cellular system according to claims 6-9 whose cells are either parental cells or cells expressing huntingtin.

11. A process for the production of the cellular system described in claims 6-10 that comprises:

(a) the obtainment of a vector with the NRSE sequence inserted upstream of a reporter gene and

(b) transfection of the cells of this system with said vector.

12. A process according to claim 11, wherein said vector is the NRSE-TK-LUC construct.

13. A transfection vector suitable to be used in a process according to claims 11-12, whose sequence comprises the NRSE sequence inserted upstream of a reporter gene.

14. A transfection vector according to claim 13, wherein the reporter gene is selected from the group consisting of the chloramphenicol acetyle transferase gene, the luciferase gene and the green fluorescent protein gene.

15. A vector according to claim 13 which is the NRSE-TK-LUC construct.

16. A method for the selection of molecules able to act in the prevention and/or treatment of Huntington's disease characterized by the following steps:

(a) incubating said molecules with a cellular system

(b) evaluating the decrease of REST transcription factor in the cytoplasm and/or its increase in the nucleus of said cells.

17. Use of NRSE inhibitors in the preparation of a medicament useful in the prevention and/or treatment of Huntington's Disease.

18. A NRSE inhibitor compound, selected by the method described in claims 1-5, 16.